•••REMARKS/ARGUMENTS•••

The Official Action of March 7, 2007 has been thoroughly studied. Accordingly, the changes presented herein for the application, considered together with the following remarks, are believed to be sufficient to place the application into condition for allowance.

By the present amendment, independent claim 1 has been changed to recite that 2.2-15% by mole of (d) CF_2=CFO[$CF_2CF(CF_3)O]_nCF_3$, was used in which n is an integer of 4-6.

Support for this limitation can be found in applicants' Example 11.

Entry of the changes to claim 1 is respectfully requested.

Claims 1-28 are pending in this application.

Claims 1-12 and 17-20 stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 5,969,066 to Enokida et al. in view of U.S. Patent No. 6,734,254 to Worm et al.

Claims 13-16 and 21-28 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Enokida et al.

For the reasons set forth below, it is submitted that all of the pending claims are allowable over the prior art of record and therefore, each of the outstanding rejections of the claims should properly be withdrawn.

Favorable reconsideration by the Examiner is earnestly solicited.

The Examiner has relied upon Enokida et al as teaching:

...a fluoroelastomer and its cross-linkable composition (col. 7, lines 10-19) using the compounds, (a) vinylidene fluoride, (b) tetra-fluoroethylene, (c) perfluoro (alkyl vinyl ether) and it is also comprised of (d) CF_2=$CFOCF_2CF_2Br$, (e) $BrCF_2CF_2I$. So, Enokida et al teaches a general composition of fluoroelastomers and their physical properties that encompasses the compounds included in claims 1-12 and 17-20 except a compound listed under (d).

In the paragraph bridging pages 2 and 3 of the Office Action the Examiner states:

Although the composition taught by Enokida et al encompasses the specific compounds of the instant application, it does not specifically include compound (d) as is recited in claim 1. The generic composition of Enokida et al teaches the claimed invention with sufficient particulars that the composition and its physical properties would have been prima facie obvious.

Further the Examiner states that:

Although the reference does not use the compound CF_2=$CFO[CF_2CF(CF_3)O]n\ CF_3$, it would have been obvious to a person skilled in the art to further to modify the composition with the reasonable expectation of success, since Worm et. al. teaches the advantages of using CF_2=$CFO[CF_2CF(CF_3)O]n\ CF_3$, in fluoroplastic polymers (col. 2, lines 10-26).

In response to applicants' arguments presented December 26, 2006 the Examiner has summarized and responded to applicants' arguments as follows:

The thrust of applicants' arguments is that Enokida et al fails to teach applicant's monomer (d), teachings of Worm et al, provide no motivation for including monomer (d) into the fluoroelastomer of Enokida et al, and hence there is no suggestion in either Enokida et al or Worm et al that the inclusion of monomer (c) improves TR70 values, particularly in combination with monomer (d).

The Examiner does not find these arguments persuasive. Applicants pointed to the monomer (d) is not being taught by Enokida et al. Please note the difference between instant claims and Enokida et al is that instant claims used the CF_2=$CFO[CF_2CF(CF_3)O]_nCF_3$ as a monomer, where as Enokida et al used CF_2=$CFOCF_2CF_2Br$. With regard to the monomer, Worm et al teaches the

advantages of using CF_2=CFO[$CF_2CF(CF_3)O]_nCF_3$ for fluoroplastics, which reads the applicants monomer (d). So, it would have been obvious to a person of ordinary skill in the art at the time the invention was made, to combine the Enokida et al and Worm et al teachings to make the instant claims composition, with a reasonable expectation of success.

The Examiner notes on page 3 of the Office Action that:

Applicants allege unexpected beneficial results to be obtained by the use of their invention, e.g., certain TR values, but have not shown this in a side-by-side comparison with ***the closest prior art.***

MPEP §716.02(b) states:

Evidence of unexpected properties may be in the form of a direct or indirect comparison of the claimed invention with the closest prior art which is commensurate in scope with the claims. See *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) and MPEP § 716.02(d) - § 716.02(e). See *In re Blondel*, 499 F.2d 1311, 1317, 182 USPQ 294, 298 (CCPA 1974) and *In re Fouche*, 439 F.2d 1237, 1241-42, 169 USPQ 429, 433 (CCPA 1971) for examples of cases where indirect comparative testing was found sufficient to rebut a prima facie case of obviousness.

MPEP §716.02(e) states:

Comparison With Closest Prior Art

In re Burckel, 592 F.2d 1175, 201 USPQ 67 (CCPA 1979). "A comparison of the claimed invention with the disclosure of each cited reference to determine the number of claim limitations in common with each reference, bearing in mind the relative importance of particular limitations, will usually yield the closest single prior art reference."

These sections of the MPEP establish that a "direct or indirect comparison" can be presented and that the "closest prior art" is that reference that has the most common limitations of the claims.

Applying these examination procedures to the instance situation clearly makes Enokida et al. the closest prior art since overall Enokida et al. teaches compositions that include (a) vinylidene fluoride, (b) tetra-fluoroethylene, (c) perfluoro (alkyl vinyl ether) and it is also comprised of (d) $CF_2=CFOCF_2CF_2Br$, (e) $BrCF_2CF_2I$.

However, as the Examiner concedes, Enokida et al, flail to teach applicants' component (d) ($CF_2=CFO[CF_2CF(CF_3)O]_nCF_3$) – for which Worm et al. has been relied upon as teaching

In order to establish a criticality associated with applicants' component (d), only an "indirect" comparison based upon a composition that was prepared from (a), (b), (d) and (e) as taught by Worm et al. and which includes applicants' component (d) is needed to demonstrate that poor TR_{70} values are obtained as compared with applicants' use of component (d). See Table 2 on page 21 of applicants' original specification.

This comparative example establishes that the inclusion of monomer (c) particularly in combination with monomer (d) improves TR_{70} values.

In addition, it is noted that the further limitation of 2.2-15% by mole of (d) $CF_2=CFO[CF_2CF(CF_3)O]_nCF_3$, where n is an integer of 4-6, which has been added to independent claim 1 is both directed to: 1) improved characteristics, including more excellent low temperature characteristics within applicants' own invention; and 2) limitations which are not taught by the prior art.

In this regard it is noted that applicants' Examples 7-9 are directed to elastomeric copolymers which were polymerized with 4.2% by mole of MPr_4VE, while applicants' Example 3 is directed to an elastomeric copolymer that was polymerized with 4.2% by mole of MPr_3VE.

Further applicants' Example 10 is directed to an elastomeric copolymer that was polymerized with 5.3% by mole of MPr_4VE, while applicants' Example 5 is directed to an elastomeric copolymer that was polymerized with 5.32% by mole of MPr_2VE.

As can be seen in these Examples when $n \geq 4$, the curing products of the copolymerized elastomeric copolymers demonstrate more excellent low temperature characteristics that similar curing products of the copolymerized elastomeric copolymers in which $n = 2$ or $n = 3$.

Applicants' further Examples 15-17 and 24 demonstrate improved low temperature characteristics that are associated with curing products of the copolymerized elastomeric copolymers in which $n = 5$ and $n = 6$.

Keeping these results in mind, it is pointed out that in the perfluorovinyl ether $CF_2=CF[OCF_2CF(CF_3)]m[O(CF_2)n]pORf$ of Worm et al. (see column 2, lines 14-16), the range of m is limited to 0-2.

Applicants have shown that when $n \geq 4$ improvements in low temperature characteristics are achieved.

This result is unexpected over Worm et al. which specifically limits n = 0-2.

Thus, applicants' invention, as presently claimed, is not obvious over Worm et al. considered alone or in combination with Enokida et al.

Based upon the above distinctions between the prior art of record as relied upon by the Examiner and the present invention, and the overall teachings of the prior art, properly considered as a whole, it is respectfully submitted that the Examiner cannot rely upon the prior art as required under 35 U.S.C. §103 to establish a *prima facie* case of obviousness of applicants' claimed invention.

It is, therefore, submitted that any reliance upon the prior art would be improper inasmuch as the prior art does not remotely anticipate, teach, suggest or render obvious the present invention.

It is submitted that the claims, as now amended, and the discussion contained herein clearly show that the claimed invention is novel and neither anticipated nor obvious over the teachings of the prior art and the outstanding prior art rejections of the claims should hence be withdrawn.

Therefore, reconsideration and withdrawal of the outstanding rejection of the claims and an early allowance of the claims is believed to be in order.

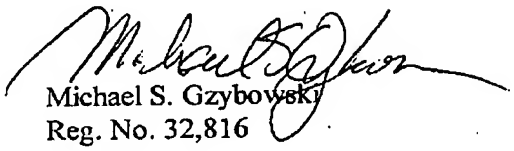
It is believed that the above represents a complete response to the Official Action and reconsideration is requested.

If upon consideration of the above, the Examiner should feel that there remain outstanding issues in the present application that could be resolved, the Examiner is invited to contact applicant's patent counsel at the telephone number given below to discuss such issues.

To the extent necessary, a petition for an extension of time under 37 CFR §1.136 is hereby made. Please charge the fees due in connection with the filing of this paper, including extension of

time fees, to Deposit Account No. 12-2136 and please credit any excess fees to such deposit account.

Respectfully submitted,



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